WE CLAIM:

1.   An electronic product manual comprising:

a plurality of data structures holding data representing a product and having a hierarchical relationship as components and sub-components with each other;

a graphical user interface (GUI) configured to present data selected from the plurality of data structures to a user in the form of displayed objects, receive input from the user, and enable a user to select data from the plurality of data structures by selecting a displayed object;

a first view of the selected data structure displayed in the GUI upon selection, the first view comprising an image of the selected object;

a second view of the selected data structure displayed in the GUI upon selection, the second view including information indicating a hierarchical relationship of the selected data structure with respect to other data structures; and

a third view of the selected data structure displayed in the GUI upon selection, the third view including component-specific information.

2.   The product manual of claim 1 wherein the first, second and third views of the selected data structure are displayed simultaneously.

3.   The product manual of claim 1 further comprising methods defined within the graphical user interface enabling selection of any displayed object from any of the first, second and third views.

4.   The product manual of claim 1 wherein the first view comprises a three-dimensional image of the selected object having user-selectable sub-components.

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5.   The product manual of claim 1 wherein the first view further comprises help information obtained from the selected data structure associated with a particular displayed object and made visible in the first view when user input indicates a focus on the particular displayed object.

6.   The product manual of claim 1 wherein the second view comprises a tree structure depicting the hierarchical relationship.

7.   The product manual of claim 1 wherein the third view presents ordering information relevant to the selected object.

8.   The product manual of claim 1 wherein each of the plurality of data structures includes data types relevant to the first, second and third views.

9.   The product manual of claim 1 wherein at least one of the plurality of data structures includes a pointer to an external data store having current information.

10.   The product manual of claim 1 further comprising:
a selection tool operable to receive user input and indicate a user-selected object from the plurality of displayed objects in one of the first, second, and third views; and
methods within the GUI for updating the first, second, and third views in response to the user's selection of an object.

11.   The product manual of claim 10 wherein each of the plurality of data structures defines a default

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perspective and the act of updating the first, second and third views comprises presenting the default perspectives.

12. A display object for a product manual having a graphical user interface, the display object corresponding to a real-world component of a system, the display object comprising:

a link to a unit data structure;

first presentation methods initiated in response to selection of the displayed object and operable to retrieve an image of the display object from the unit data structure and display the image using the graphical user interface;

second presentation methods initiated in response to selection of the displayed object and operable to retrieve a hierarchical view from the unit data structure and display the hierarchical view using the graphical user interface; and

third presentation methods initiated in response to selection of the displayed object and operable to retrieve a information about the real-world component from the unit data structure and display the information using the graphical user interface.

13. The display object of claim 12 further comprising:

selection methods operable to retrieve selected data from the unit data structure in response to user input indicated selection of the displayed object.

14. The display object of claim 12 further comprising ordering methods implementing a product ordering interface for ordering the real-world component.

15. The display object of claim 12 further comprising documentation methods for obtaining a pointer to a documentation database from the unit data structure and accessing the documentation database containing documentation associated with the real-world component.

16. The display object of claim 12 further comprising functionality methods for accessing a description of functionality of the real-world component from the unit data structure.

17. The display object of claim 12 further comprising actions methods for accessing a description of actions that are possible to perform on the real-world component from the unit data structure.

18. The display object of claim 12 further comprising error state methods for accessing a description of potential error states for the real-world object from the unit data structure.

19. The display object of claim 12 further comprising:
animation methods coupled to communicate with the actions methods for retrieving animation sequence data from the unit data structure and generating an animation depicting the actions on the graphical user interface.

20. The display object of claim 12 further comprising:
animation methods coupled to communicate with the functionality methods for retrieving functionality data from the unit data structure and generating an animation depicting the functionality on the graphical user interface.

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21. The display object of claim 12 further comprising data structures within the unit data structure for indicating relationships between the display object and other, external display objects, wherein the relationships mirror relationships between real-world components.

22. The display object of claim 12 wherein the unit data structure includes a definition of a default perspective for the display object in each of the first, second, and third presentation methods.

23. A method for displaying a product manual for a particular product, the product comprising a plurality of components and sub-components, in an interactive graphical user interface, the method comprising the acts of:

gathering resources related to the product and its components and sub-components, the information including information of types selected from the group consisting essentially of documentation, ordering information, graphical display information, functionality, actions, error states and animation;

organizing the information into sets of information related to particular components and sub-components within the particular product;

defining a unit object data structure to hold data for related to a particular component irrespective of the data type; and

using data from the unit data structure of an initial component to generate a graphical user interface corresponding to the unit data structure and presenting user-selectable links to sub-component unit data structures.

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24. The method of claim 23 further comprising the act of using the first instance to instantiate subsequent instances of the unit object class for selected sub-components.

25. An appliance comprising:

a plurality of subsystems cooperating to cause the appliance to perform one or more functions;

an electronic control system including a data processor and memory capable of executing program instructions to control operation of the subsystems;

an interface coupled to the data processor for accessing external data sources; and

computer code devices executing on the data processor to cause the processor to implement a graphical user interface displaying data obtained from the external data sources.